



# GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

## CROPLANDS RESEARCH GROUP: [Japan]Country Update

December 7-8, 2020  
Online annual group meeting

CRG representatives:



Dr. Ayaka W. Kishimoto-Mo  
NARO-Institute for Agro-Environmental Sciences, Japan



# Activities/Accomplishment since last meeting

- **Country Update** (e.g. communications, meetings, workshops, funding applications, participation in Flagships or other GRA activities etc.)
  - *Sharing CRG activities to Japanese researchers and policymakers, this year especially **contributed to Webinar and Newsletter**;*
  - *Bridging Croplands Group with Paddy Rice Group and Livestock Group among Japanese researchers;*
  - **Facilitating CRG-Facebook page;**
  - *Attending online webinars of other GRA groups;*
  - **Special issue guest editors with group members.**



# Activities/Accomplishment since last meeting

- October 28, 2020
- Dr. Ayaka Kishimoto-Mo
- Advertised in CRG+AFINET FB and Twitter accounts
- Registration form: [102 registration forms filled out](#)
- Participants: [35+9 attendees... + 100 views in YouTube](#)
- Video: [https://youtu.be/SNY59N7W\\_A0](https://youtu.be/SNY59N7W_A0) (AFINET Project YouTube Channel)



- Japan registered "Biochar addition to cropland/grassland soils" as a new J-Credit methodology (agriculture sector) on September 30, 2020
- Source: Dr. Ayaka Kishimoto-Mo (NARO, Japan)

**AG-004: Biochar addition to mineral soil in cropland/grassland**

[Mitigation method] • Stock refractory carbon in mineral soil by adding biochar to cropland and/or grassland.

[Main eligibility criteria] ① To add biochar to carbon after 100 such default value ② Added biochar is carbon after 100 such default value ③ Feedstocks of addition of biochar fuel; z

[Credit volume calculation approach] • CO<sub>2</sub> stock (= Add 44/12) - CO<sub>2</sub> emi

[Main monitoring items] • Quality of biochar measured by one of ① Measuring the ② Measuring the JIS M 8812: 2004, "Coal and coke - Methods for approximate analysis" ③ Measuring the organic carbon content, being based on the Japan Biochar Association's specification on the measurement of biochar for carbon stocks in soil

nd as defined in Article 2 of the Cropland Act. organic carbon content and fraction of biochar artifiable feedstocks/temperature that make ; unutilized (including the case of by-product content x Fraction of biochar carbon x and transportation content or degree of refinement, which are x validation or first certification. ily) by a charcoal refinement meter, etc al experimental station, etc., being based on

[Diagram of methodology]

Baseline: Mineral soil in cropland/grassland

Post-project: Biochar addition makes refractory carbon stocked in soil with limited decomposition for a long time. CO<sub>2</sub>-converted volume of carbon stock. Mineral soil in cropland/grassland

# Research and Capability Priorities

- *Research Opportunities: – identify research gaps or opportunities for the CRG and Networks to raise during the discussion session*
  1. Priority topic 1: Reconstructing CRG networks for cutting-edge research activities
  2. Priority topic 2: Collaboration possibility: Biochar for zero emission agriculture – the scientific foundations and socio-economic schemes
- *Capability Opportunities: – identify upcoming workshops and training or projects with potential for students*
  1. Priority 1: NARO-OECD International Conference: Adaptations to climate change in the food system: Enhancing synergies and breaking trade-offs between adaptation, mitigation, and ecosystem services (before December 2021, depend on COVID-19 situation)
  2. Priority 2: NARO accepts international internships and helps find host researchers to apply for JSPS postdoctoral fellowships.

